

Early Career Collaboration Award
Report 2014
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I benefited significantly from the two-month visit to the Department of Earth Science at Dartmouth college through meeting with new researchers and learning new skills. My host Prof. Mukul Sharma very patiently taught me how to purify Re and Os from black shales using Carius tube, liquid extraction, and micro-distillation techniques, and how to measure the isotopes on a negative ion thermal ionization mass spectrometer. These processes took quite a lot of time, but after going through the hands-on problem solving experience, I can independently do the chemistry and isotope measurement. We have some initial results, and more samples are to be analyzed later this year, supported by separate funding sources.

During my stay at Dartmouth, I also interacted with Dr. Devon Renock in the Department of Earth Science, who kindly instructed me how to use the environmental SEM housed in the same department. Using this technique I examined thin sections of the same samples that we measured Re-Os isotopes.